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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,106	12/07/2004	Hans Paul Tuinhout	NL02 0488US	1314
65913	7590	09/07/2007	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			BAISA, JOSELITO SASIS	
			ART UNIT	PAPER NUMBER
			2832	
			NOTIFICATION DATE	DELIVERY MODE
			09/07/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

## Office Action Summary

Application No.

10/517,106

Applicant(s)

TUINHOUT ET AL.

Examiner

Joselito Baisa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/13/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group I (Claims 1-8) in the reply filed on 25 June 2007 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application could be made without serious burden. This is not found persuasive because the claimed species necessitate searching for different embodiments.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greitschus et al. [5872504] in view of Nicholson et al. [6507272].

Greitschus discloses a resistor network 10 comprising at least a resistor body 4, which is provided with at least a column of taps (5, 3), situated between a first tap 5 and a second tap 3 [Col. 2, Lines 23-40, Figure 1].

Greitschus discloses the instant claimed invention discussed above except for at least two taps can be connected with respective first and second sources of reference input potentials, and wherein each tap of the at least one column of taps can be used for outputting an output potential via a contact area which is connected with the concerning tap, characterized in that, the resistor

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body comprises a multiple of resistor sub-bodies, wherein each resistor sub-body is connected with a column of taps , and wherein the only electrical connections between the resistor sub-bodies are electrical connections via taps connected with the resistor sub-bodies.

Nicholson discloses at least two taps can be connected with respective first and second sources of reference input potentials ( $V_{in}$ ), and wherein each tap of the at least one column of taps can be used for outputting an output potential ( $V_{out}$ ) via a contact area which is connected with the concerning tap, characterized in that, the resistor body comprises a multiple of resistor sub-bodies, wherein each resistor sub-body is connected with a column of taps , and wherein the only electrical connections between the resistor sub-bodies are electrical connections via taps connected with the resistor sub-bodies [Col. 7-19, Lines , Figure 7].

It would have been obvious to one having ordinary skill in the art at the time of the invention to use a resistor network with at least two taps can be connected with respective first and second sources of reference input potentials , and wherein each tap of the at least one column of taps can be used for outputting an output potential , characterized in that, the resistor body comprises a multiple of resistor sub-bodies as taught by Nicholson to the resistor network of Greitschus.

The motivation would have been to minimize settling time after a tap change by inducing equal and opposite voltage change at points close together [Col. 1, Lines 60-65].

Regarding claim 2, Greitschus discloses resistor sub-body provided with at least one column of taps, wherein each tap 3 of the column of taps is an extremity such as an S-shaped

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projection which is connected with the concerning resistor sub-body 4 [Col. 2, Lines 53-60, Figure 1].

Regarding claim 3, Nicholson discloses a plurality of taps (nodes) of a first column of taps of a first resistor sub-body is connected with a plurality of taps (nodes) of a second column of taps of a second resistor sub-body, wherein each tap of the plurality of taps of the first column is connected with only one tap of the plurality of taps of the second column and wherein each tap of the plurality of taps of the second column is connected with only one tap of the plurality of taps of the first column [see Figure 7].

Regarding claim 4, Nicholson discloses each tap (node) of the first column is shifted at least one column position with respect to the column position of the tap of the second column with which the tap of the first column is connected [see Figure 7].

Regarding claim 5, the respective connections between the resistor sub-bodies with the taps are made during fabrication of the resistor network at different arbitrary positions with respect to the respective taps, the claim is a method counterpart of structure of the rejected claims and method steps therefore are inherent for manufacturing a ladder network resistor.

Regarding claim 6, Greitschus discloses the resistor network is a semiconductor-circuit, wherein each resistor sub-body comprises a number of resistor layers 4, wherein each

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semi-conducting resistor layer comprises at least two taps (5, 3), and wherein the semi-conducting resistor layers 4 are interconnected via the taps (5, 3) [Col. 2, Lines 23-40, Figure 1].

Regarding claim 7, Nicholson discloses an Analog-Digital converter comprises a resistor network [Col. 5, Lines 24-27].

Regarding claim 8, Nicholson discloses a Digital-Analog converter comprises a resistor network [Col. 5, Lines 24-27].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joselito Baisa whose telephone number is (571) 272-7132. The examiner can normally be reached on M-F 5:30 am to 2:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joselito Baisa  
Examiner  
Art Unit 2832

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